PS

PS R2 Series Systems

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First we set the standard. Now we're raising the bar.

For more than 15 years, the NEXO PS Series has set the standard for compact, high-output loudspeakers. Now NEXO is raising the bar. The new PS R2 Series builds upon the groundbreaking performance of its predecessor with even more power and bandwidth, greater versatility and better value in both installed sound and touring applications.

More Power and bandwidth

More than 200,000 NEXO PS Series speakers are already hard at work around the world in applications where compact, high-output, linear response loudspeakers are required. Now the new PS R2 Series delivers as much as a 5dB higher sound pressure levels from a range comprising three scalable systems, all of which can be quickly and easily configured for main PA use, for use as floor monitors, or flown vertically or horizontally in installations or for use as side/rear fills.

The PS R2 Series offers the user a totally integrated loudspeaker solution, in which innovative transducer, waveguide and enclosure designs come together under the control of strategic equalisation from new, dedicated TD Controllers to ensure extended bandwidth and sound pressure levels, along with a high degree of speaker protection.

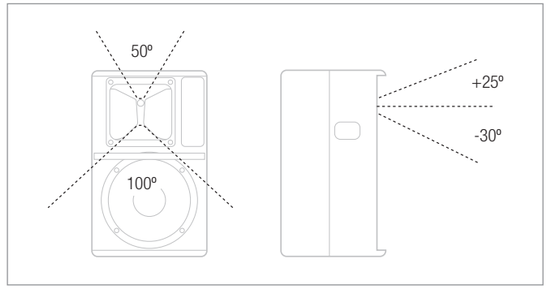
Greater Versatility

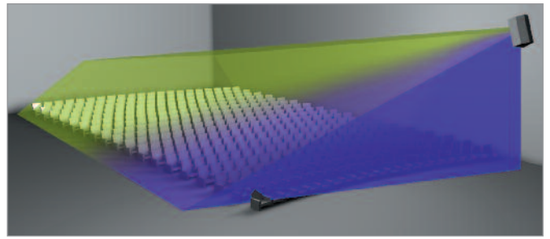
Central to the advanced performance of the PS R2 Series is NEXO's Asymmetrical Dispersion Constant Directivity horn design. Quick and easy for the user to rotate, it focusses more of the output of the loudspeaker on the audience (or performer when used as a monitor), greatly increasing the versatility of the system without compromising its performance in any given application.

The Asymmetrical Advantage

A satisfactory audience experience often necessitates a compromise between the wide, short throw coverage required by listeners closest to the stage, and the narrow, long throw coverage required by those at the back of the venue. Similarly, coverage from monitors must be wider when the performer is closer to the speaker, and narrower when further away. The asymmetrical horns used in all PS R2 Series speakers are engineered such that the vertical coverage is narrower above horn axis than below. A few minutes is all it takes to remove the grille, unscrew the horn and rotate it to ensure optimum directivity in every application. When used as the main PA, PS R2 systems significantly reduce the amount of ambient, reverberant energy caused when loudspeakers misdirect their output towards walls and ceilings. And in monitor mode, more of the output can be focussed on the performer.

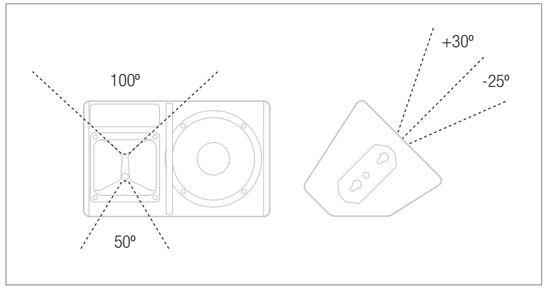
Front-of house configuration

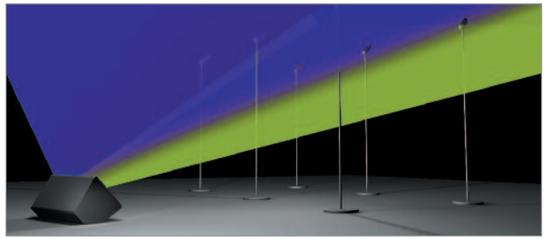




In conventional Front Of House configuration, a PS R2 Series loudspeaker yields 50° horizontal coverage at 25° above the centre line. Rotating the horn expands this to 100° at 50° below the centre line, such that coverage narrows.

Stage monitor configuration





In stage monitor mode, a PS R2 Series loudspeaker yields 100° horizontal coverage at 30° above the centre line, narrowing to 50° horizontal coverage at 25° below the centre line for use when the performers are further away.

A sticker on the wide dispersion side of the horn indicates the correct orientation for FOH and wedge monitoring applications. The arrow on the sticker indicates the 'wide side' of PS horn dispersion. Users simply need to position the arrow such that it points in the direction requiring widest coverage, and away from the direction requiring narrowest coverage.

Faster
Set up

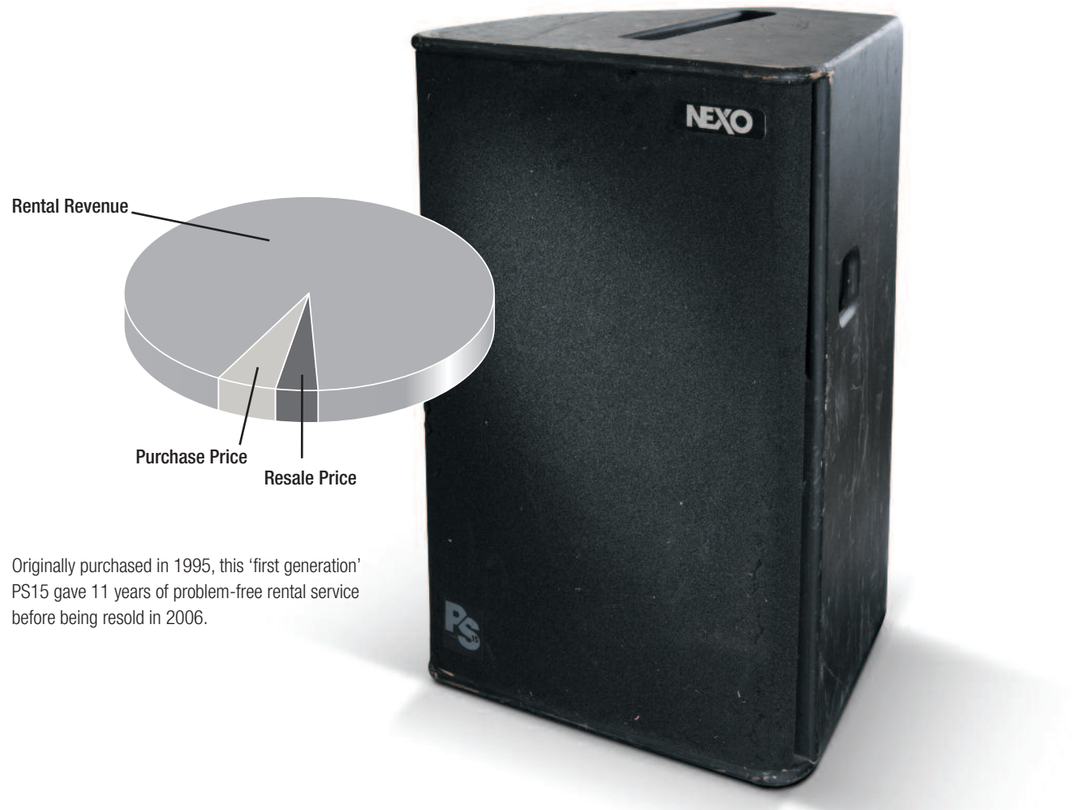
The versatility of PS R2 Series loudspeakers is enhanced yet further by a full range of rigging and flying hardware (see pages 20/21) – the development of which benefits from NEXO's 30 years of experience in touring sound systems. And system installers will discover a similarly comprehensive range of mountings for permanent installation.

In fixed installations, analogue controllers ensure accurate reproduction at high output levels, while mobile sound operators may choose to use NEXO powered TDControllers (see page 22), with their enlarged library of presets for instant access to popular configurations.

NXAMP 4x4 Powered TDController

A better
Investment

PS Series loudspeakers have a hard-earned reputation for performance and reliability, with countless examples performing night-in, night-out, for more than a decade, without a single problem. Built in NEXO's new, state-of-the-art production facility in France and engineered from the outset for a long, trouble-free life, the new PS R2 Series is set to enhance this reputation yet further through a combination of even more exacting manufacturing standards and advanced driver protection technology.



Originally purchased in 1995, this 'first generation' PS15 gave 11 years of problem-free rental service before being resold in 2006.

PS8

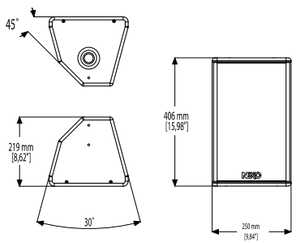
Key Features

- High-power system (125dB Peak SPL @ 1m) with new 8in LF and 1in HF low magnetic emission Neodymium drivers for light weight (7.5kg, 16.5lbs) and negligible magnetic leakage.
- Rotatable, asymmetrical horn and unique cabinet architecture ensure versatility; user-adaptable for both PA and stage monitoring applications.
- Two-way passive 8Ω design uses a single amplifier channel for simpler installation and lower cost.
- Sophisticated control electronics ensure reliable, linear operation. Supported with a full range of mounting and flying accessories.

Architectural and Engineering Specifications

The 2-way full range loudspeaker system shall have one 8 inch shielded neodymium cone transducer and a 1 inch shielded neodymium compression driver on a low distortion constant directivity asymmetrical dispersion horn. The system's horizontal coverage shall range from 50° to 100°, with vertical coverage of +25° and -30°. The user shall be able to rotate the horn in 4 directions as required by the application. The system shall have a Q of 10 and a Directivity Index that is 10 at frequencies above 1.8kHz. Nominal Sensitivity shall be 96dB (94dB wideband). When driven by a NEXO NXAMP 4x1, NXAMP 4x4 a PS8 TDController or by a NX242 properly connected to amplification capable of delivering 200 to 500 Watts into an 8Ω (nominal) load the system shall be capable of 122dB to 125dB peak SPL, with a frequency response of 69Hz to 19kHz ±3dB (62Hz to 20Hz -6dB). The system shall include an internal passive crossover. Electrical connections shall be made via one of the two 4-pole NL4MP SPEAKON connectors.

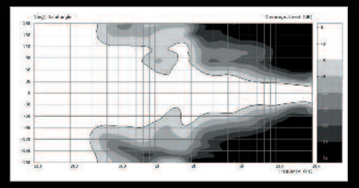
The system shall have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in textured black or white coating and having exterior dimensions no greater than 406mm H x 250mm W x 219mm D (16.0in H x 9.8in W x 8.6in D): the system shall weigh 7.5kg (16.5lbs). Exterior hardware shall include 3 mounting points (2 on the top, 1 on the bottom), 6 mounting points on the sides and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the PS8 with a PS8 TDController, NXAMP 4x1, NXAMP 4x4 or NX242.



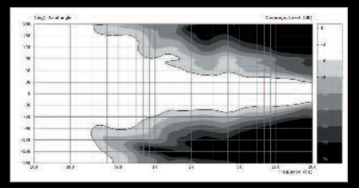
PS8 Loudspeaker

The PS8 features advanced NEXO designed low magnetic emission Neodymium drivers, making the PS8 extremely light and compact while usable next to magnetically-sensitive professional video or computer equipment. The dispersion, architecture and weight balance are designed to provide uncompromised PA and stage monitor performance from a single speaker, and background and foreground music playback applications are equally well-served.

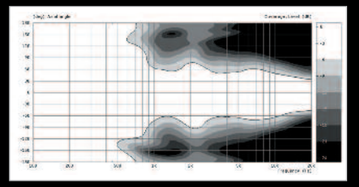
Like the new PS10-R2 and PS15-R2, this flexibility is realized by a proprietary constant directivity asymmetrical dispersion horn, easily configurable (by users) in four positions by 90° rotations. Coupled with the horn's unique progressive horizontal (50° to 100°) and vertical (55°) dispersion, the most suitable pattern can be selected for vertical or horizontal PA usage or wedge monitoring. The PS8's 2-way passive 8Ω design employs a single amplifier channel to deliver bi-amped performance, reducing system cost, size and complexity, and a new grille design increases durability while fully accommodating use as a wedge.



PS8 horizontal coverage, +25°



PS8 horizontal coverage, 0°



PS8 horizontal coverage, -25°

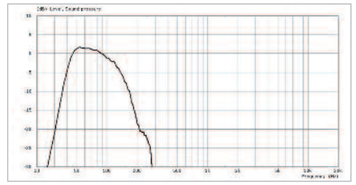
System Applications

- Installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, theme parks, etc.
- High-quality, low-profile stage monitoring for clubs, A/V, theatre, broadcast, etc.
- Near-field, down-fill and under-balcony systems in support of larger systems.
- Foreground and background music source for retail establishments seeking audio with impact.
- Anywhere powerful, high-quality performance is required near to magnetically-sensitive equipment.

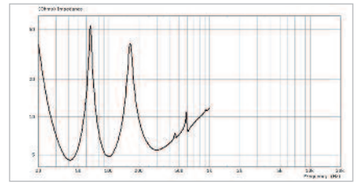
LS400-SUB Sub-Bass

The LS400 Sub-Bass extends the usable range of the PS8 Loudspeaker to 40Hz, providing high performance and high power output (131dB Peak) in an extremely compact, light weight package. The NEXO-designed shielded 12in Neodymium driver allows the LS400 to be used in close proximity to magnetically sensitive video equipment.

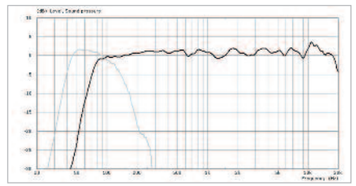
One LS400 is typically used with two PS8 loudspeakers, additional units may be used for an enhanced LF impact. The PS8 TDController's integral sub section and combined signal (PS8 and LS400) Speakon wiring ensure cost-effective and simple system implementation.



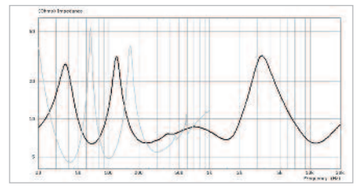
LS400 response



LS400 impedance



PS8 + LS400 response



PS8 + LS400 impedance

PS8

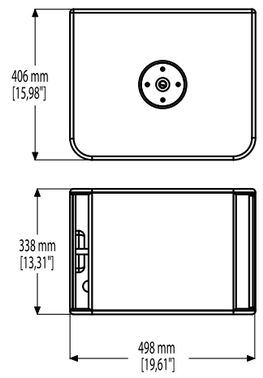
LS400-SUB Sub-Bass Key Features

- High-power system (131dB Peak SPL @ 1m) with 12in VLF low magnetic emission Neodymium driver for light weight (14.6kg, 32lbs) and negligible magnetic leakage.
- VLF extension (to 40Hz) of PS8 Loudspeakers. Sophisticated control electronics ensure reliable, linear operation.
- Integral pole mount that supports one or two PS8 Loudspeakers.

Architectural and Engineering Specifications

The sub-bass loudspeaker system shall have one 12in VLF shielded long excursion neodymium cone transducer. Nominal Sensitivity shall be 99dB. When driven by a NXAMP 4x1, NXAMP 4x4 a PS8 TDcontroller or by a NX242 properly-connected to amplification capable of delivering 300 to 700 Watts into a 6Ω (nominal) load the system shall be capable of 128dB to 131dB peak SPL, with a frequency response of 43Hz to 120Hz ±3dB (40Hz to 140kHz -6dB). The system shall include an active crossover. Electrical connections shall be made via one of the two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 338mm H x 500mm W x 406mm D (13.3in H x 19.7in W x 16.0in D): the system shall weigh 19.3kg (43 lbs). Exterior hardware shall include 1-pole socket. The system shall be the NEXO LS400 with either the PS8 TDController, NXAMP 4x1, NXAMP 4x4 or NX242.



Key Features

- Precision circuits specifically engineered for the PS8/LS400 systems permit increased SPL and operational reliability.
- Servo-controlled VCEQs provide precise dynamic control without spectral imbalance.
- Two inputs and three outputs enable a single PS8 TD to manage multiple PS8 and LS400 products.
- Comprehensive status indicators and controls.

PS8 TDController

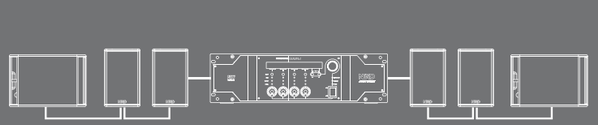
The PS8 TDController is an advanced analogue processor that allows the PS8 Loudspeaker and optional LS400 Subwoofer to achieve superior performance from an exceptionally small format. The PS8 TD provides crossover, sensed amplifier control and system equalization, optimised for the PS8 and LS400. Each PS8 TD has two inputs and three outputs, L, R and summed sub out, minimising installation cost and complexity.

Like all NEXO processors, the PS8 TD provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), strategically reducing levels only at frequencies when and where necessary.

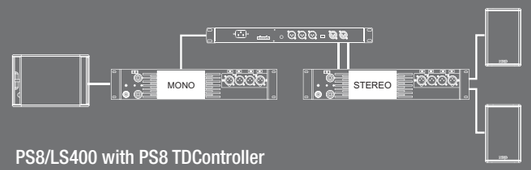
Architectural and Engineering Specifications

The PS8 TDcontroller shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, adjustable peak limiter and Temperature & Displacement protection for NEXO PS8 and LS400 products. The unit shall have electronically balanced analogue inputs and outputs. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS8 loudspeakers to exceed speaker-dependent thresholds. The device shall have 3x inputs providing feedback from amplifier output to allow real time monitoring of amplifier voltage. Crossover function between PS8 loudspeakers and the LS400 Subwoofer shall be controlled by the PS8 TDcontroller. Maximum input shall be 22dBu with CMRR 90dB@1kHz and noise floor below -100dB for the 0dB rear-panel switch. A 3-position, rear-panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +22/+16/+10dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and LS400 (VLF) displacement protection (also yellow). The chassis shall be constructed of steel with a black paint finish. Input power shall range from 110 to 220VAC continuously, 50-60Hz with a rear panel earth-lift. The 1RU controller shall weigh 2.9kg(6.4lbs), with exterior dimensions of 483mmW x 44mmH x 190mmD (19" x 1.75" x 7.5"). The chassis shall be constructed of steel with a black paint finish. The controller shall be the NEXO PS8 TDcontroller. The unit shall be UL approved and comply with electrical international standard (CB scheme) based upon the European standard EI60065. The unit shall fulfill the electromagnetic requirement of the harmonized standards EN55013, EN55020 and of the requirement of the FCC PART 15 CLASS b regulation. Other integrated loudspeaker-controllers shall be acceptable, provided independent laboratory test results verify these specifications are equaled or exceeded.

System configurations



PS8/LS400 with NXAMP 4x1



PS8/LS400 with PS8 TDController

PS8 Loudspeaker Specifications

Product Features

Components	LF 1 x 8" (20 cm) Shielded Neodymium 8Ω driver HF 1 x 1" Shielded Neodymium throat driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	406mm x 250mm x 219 mm (16" x 9 7/8" x 5 5/8")
Weight	7.5 kg (16.5 lbs)
Connectors	2 x NL4MP SPEAKON 4 pole
Construction	Baltic Birch Ply finished with textured black coating
Fittings	Handles - Front finish: Moulded Dark Grey Metal Grill Flying Points & Fixed Installation Threaded inserts are fitted as standard to all cabinet surfaces for connection of mounting accessories
Stand fittings	Built-in Stand Fitting, (35mm / 1 3/8")

System Specifications PS8 with PS8 TDController

Frequency Response [a]	69 Hz - 19 kHz ±3dB
Usable Range @-6dB [a]	62 Hz – 20 kHz
Sensitivity 1W @ 1m [b]	96 dB SPL Nominal - 94 dB SPL Wideband
Nominal Peak SPL @1m [b]	122 to 125dB Peak
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn, 4 positions
Directivity	Q : 10 Nominal DI : 10 dB Nominal (f > 1.8 kHz)
Crossover Frequencies	2.5 kHz Passive
Nominal Impedance	8Ω
Recommended Amplifiers	200 to 500 W / 8Ω

LS400-SUB Sub-Bass Specifications

Product Features

Components	LF 1 x 12" (30cm) long excursion 6Ω driver
Height x Width x Depth	338mm x 500mm x 406mm (13 1/4" x 19 5/8"" x 16")
Weight	19.5 kg (43 lbs)
Connectors	2 x NL4MP SPEAKON 4 pole
Construction	Baltic Birch Ply & textured black coating
Fittings	2 Metal Handles
Stand fittings	Internal Stand Fitting on Top (35mm / 1 3/8") allows pole mounting of 1 PS8.

System Specifications LS400 with PS8 TDController

Frequency Response [a]	43 Hz - 120 Hz ±3dB
Usable Range @-6dB [a]	40 Hz - 140 Hz
Sensitivity 1W @ 1m [b]	99 dB SPL Nominal
Nominal Peak SPL @ 1m [b]	128 to 131 dB Peak
Crossover Frequencies	120 Hz Active through PS8TDController
Nominal Impedance	6Ω
Recommended Amplifiers	300 to 700 Watts / 4Ω

PS8 TDController Specifications

Product Features

Audio Inputs	Two differential non floating L&R Audio inputs, 50 kOhm. Two XLR-3F connectors.
Sense Inputs	Three Amplifier Sense Inputs (PS8 L&R, LS400). 400 kOhm. 6 Pole Removable Strip Terminal.
Audio Outputs	Two L&R PS8 Audio outputs. Balanced, non floating, 51 Ohm. Two XLR-3M. One Mono (L+R) LS400 Audio output. Balanced, non floating, 51 Ohm. One XLR-3M.
Controls	Gain switch (back panel), 3 positions : -6 / 0 /+6dB. Peak Limiter trimmer (600W-200W/8 Ohms) Sub Overlap / Crossover switch & Sub Gain Control (-/+ 6dB).
Indicators	LF speakers Protect Yellow LED's (Temp. & Disp), Power ON (green), Amp Sense & Peak LED's (green/Red)
Dimensions	1U 19" Rack. 165mm (6.5") Depth
Weight	2.9 kg (6.6 lbs) net

Specifications

Output Level	+22 /+16/+10 dBm typ. into 600 Ohm load. Back Panel switch on +6/0/-6dB respectively.
Input Section	Maximum input Level : 22dBu. CMRR 90dB @ 1kHz typ.
THD+N	0.05% @ 1kHz Typ. for +10dBm Output
Noisefloor	-90 /-96 /-100 dBV for +6 /0 /-6dB switch position (22 Hz - 22 kHz, UnWeighted)
Dynamic Range	111 dB UnWeighted (THD+N at-60dBr sine wave @1kHz rel.max. output)
Crosstalk	104dB
Filtering & EQ.	L&R: 12dB/oct Low Pass, 12dB/oct High pass (crossover or overlap), 4 Parameter EQs. All factory tuned
Protections	VCA temp. (SUB,LF & LF), VCEQ disp. (SUB & LF), Peak Limiter (all chanels), Power compression regulation
Power Supply	100-250 Volts (continuous operation), 50-60Hz. Power 9W. Peak Inrush current 0.5A. Earth-Lift.
Conformity	Comply with safety objective of 73/23/EEC & 89/336/EEC directives. (EN60065-1998, EN55103-1996) CB scheme, cULus certifications in progress

System Operation

Electronic Controller	The PS8 TDController is precisely matched to the PS8 & LS400 cabinets and includes sophisticated protection systems. Using PS8 & LS400 without a properly connected PS8TD will result in poor sound quality and can damage the components. PS8 & LS400 can also be used with NXAMP4x1 and NXAMP4x4 Powered TDControllers.
Dispersion configuration	After dismounting the front grille from its fixings, the HF Horn can be rotated in 4 positions for dispersion configuration.
Sub-bass	The PS8 can be used without optional LS400 Sub-bass. Active two-way operation with the LS400 is included in the PS8TD. One LS400 matches 2 x PS8, additional LS400 may be used for enhanced LF capability.
Speaker Cables	PS8 are wired 2- & 2+ on Speakon connectors, LS400 on 1- & 1+. Loop through Speakons are present on both. Single identical cables can thus be used to loop through combinations of up to 2 x PS8 & 1 x LS400 in no particular order.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.
[a] Response curves & data : Anechoic Far Field for the PS8 + PS8TD. Half-Space Anechoic radiation for the LS400 + PS8TD.
[b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise.
Nominal refers to Voice Decade (300 Hz - 3 kHz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations.
Peak SPL is at clipping of recommended amplifier.
[c] Directivity curves & data : obtained by computer treatment on off axis response curves.
E&OE September 2009.

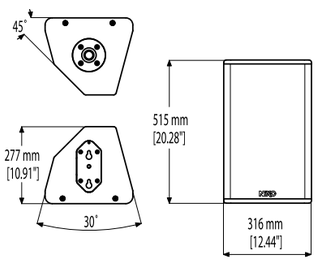
Key Features

- High-power system (132dB Peak SPL@1m) with 10in LF and 1in HF drivers.
- Rotatable asymmetrical horn and unique cabinet architecture ensure versatility.
- User-adaptable for both PA and stage monitoring applications.
- Two-way passive 8Ω design uses a single amplifier channel for simpler installation and lower cost.
- Sophisticated control electronics ensure reliable, linear operation.
- Supported with a full range of mounting and flying accessories.

Architectural and Engineering Specifications

The 2-way loudspeaker system shall have one 10 inch shielded Neodymium 8Ω cone transducer and a 1inch compression driver on a low distortion constant directivity asymmetrical dispersion horn. The system's horizontal coverage shall range from 50° to 100°, with vertical coverage of +25° and -30°. The user shall be able to rotate the horn in 4 directions as required by the application. The system shall have a Q of 16 and a Directivity Index that is 12 at frequencies above 3kHz. Nominal Sensitivity shall be 99dB (97dB wideband). When driven by a NXAMP 4x1, NXAMP 4x4 a PS10 TDController-R2 or by a NX242 properly-connected to amplification capable of delivering 500 to 1250 Watts into an 8Ω (nominal) load the system shall be capable of 129dB to 132dB peak SPL, with a frequency response of 65Hz to 20kHz ±3dB (58Hz to 21Hz -6dB). The system shall include an internal passive crossover. Electrical connections shall be made via one of the two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 515mm H x 316mm W x 277mm D (20.28 inches H x 12.4 inches W x 10.9 inches D): the system shall weigh 14 kg (31lbs). Exterior hardware shall include 1 metal plate, 2 attachment points and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the PS10-R2 with either, a PS10 TDController-R2, NXAMP 4x1, NXAMP 4x4 or NX242.



PS10-R2 Loudspeaker

A high power system capable of producing 132 dB Peak SPL, the new PS10-R2 Loudspeaker can be safely driven with up to 1250 Watts of amplifier power. Controlled by the new, dedicated PS10 TDController-R2, or the NXAMP Powered Controller, the PS10-R2 achieves high SPLs and wide bandwidth performance, despite being only half the weight and volume of common trapezoidal loudspeaker systems.

Along with the flexible coverage patterns enabled by NEXO's proprietary constant directivity asymmetrical dispersion horn, the architecture and weight balance of the PS10-R2 are designed to provide both uncompromised PA and stage monitor performance from a single speaker. Left and Right versions of the PS10-R2 have been developed to provide a true stereo image – particularly important for wedge applications. The 2-way passive 8Ω design uses a single amplifier channel to deliver bi-amped performance, reducing system cost, size and complexity, while the new cabinet design incorporates a pole mount and a new hardware adapter compatible with a vast array of touring and fixed installation accessories.

PS10-R2 horizontal coverage, +25°

PS10-R2 horizontal coverage, 0°

PS10-R2 horizontal coverage, -25°

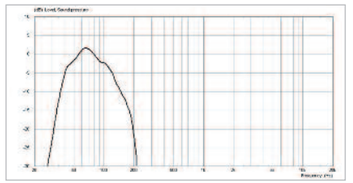
System Applications

- Touring, installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, etc. High-quality stage monitoring for cabarets A/V, theatre, broadcast, etc.
- Fill-in system for use with larger NEXO PS/Alpha systems, or any application needing exceptional side, down and near-field augmentation.

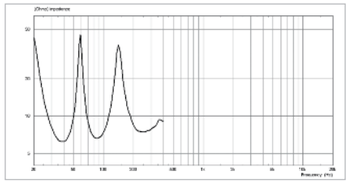
LS600-SUB Sub-Bass

A high power system capable of producing 138 dB Peak SPL, the new LS600 Sub-Bass extends the usable range of the PS10-R2 Loudspeaker to 38Hz, providing exceptional performance and high power output in an extremely compact, light weight package.

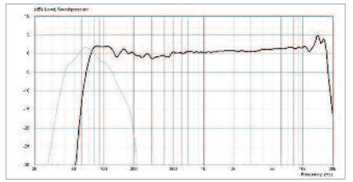
The PS10 TDController-R2's integral sub section and combined signal (PS10-R2 and LS600) Speakon wiring ensure cost effective and simple system implementation. One LS600 is typically used with two PS10-R2 loudspeakers, additional units may be used for an enhanced effect.



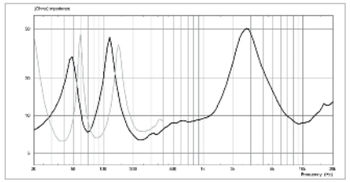
LS600 response



LS600 impedance



PS10-R2 + LS600 response



PS10-R2 + LS600 impedance

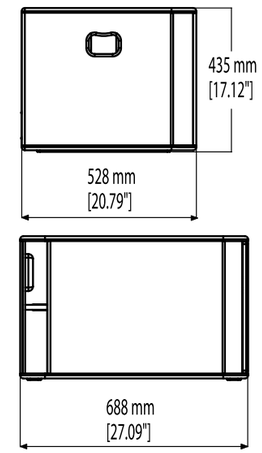
LS600-SUB Sub-Bass Key Features

- High-power system (138dB Peak SPL @ 1m) with 15in VLF long excursion driver.
- VLF extension (to 38Hz) of PS10-R2 Loudspeakers.
- Sophisticated control electronics ensure reliable, linear operation.
- Integral pole mount that supports one or two PS10-R2 Loudspeakers.

Architectural and Engineering Specifications

The sub-bass loudspeaker system shall have one 15 inch shielded Neodymium 8Ω long excursion cone transducer. Nominal Sensitivity shall be 101dB. When driven by a NEXO NXAMP 4x1, NXAMP 4x4 a PS10 TDController-R2 or by a NX242 properly-connected to amplification capable of delivering 1000 to 2000 Watts into a 4Ω (nominal) load the system shall be capable of 135dB to 138dB peak SPL, with a frequency response of 40Hz to 110Hz ±3dB (38Hz to 120kHz -6dB). The system shall include an active crossover. Electrical connections shall be made via one of two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 435mm H x 688mm W x 528mm D (16.9in H x 27.1in W x 20.8in D): the system shall weigh 30 kg (66lbs). Exterior hardware shall include 1 metal plate, 2 attachment points and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the NEXO LS 600 with the PS10 TDController-R2, NXAMP 4x1, NXAMP 4x4 or NX242.



Key Features

- Precision circuits engineered for the PS10-R2/LS600 systems permit increased sound pressure and operational reliability.
- Servo-controlled VCEQs provide precise dynamic control without spectral imbalance.
- Two inputs and three outputs enable a single PS10 TDController-R2 to manage multiple PS10-R2 and LS600 products.
- Comprehensive indicators and controls.

PS10 TDController-R2

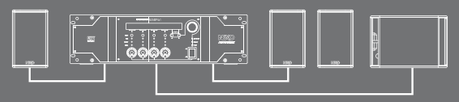
The PS10 TDController-R2 is an advanced analogue processor that allows the PS10-R2 Loudspeaker and optional LS600 Subwoofer to achieve exceptional performance from such compact packages. The PS10 TDController-R2 provides crossover, sensed amplifier control and system equalisation optimised for the PS10-R2 and LS600. One PS10 TDController-R2 has two inputs and three outputs, L, R and summed sub out, minimising installation cost and complexity.

Like all NEXO processors, the PS10 TDController-R2 provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

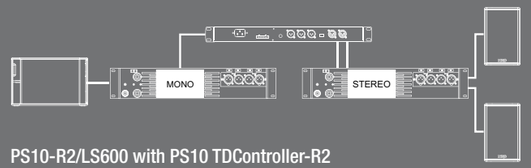
Architectural and Engineering Specifications

The PS10 TDcontroller R2 shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, adjustable peak limiter and Temperature & Displacement protection for NEXO PS10-R2 and LS600 products. The unit shall have electronically balanced analogue inputs and outputs. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS10-R2 loudspeakers to exceed speaker-dependent thresholds. The device shall have 3x inputs providing feedback from amplifier output to allow real time monitoring of amplifier voltage. Crossover function between PS10-R2 loudspeakers and the LS600 Subwoofer shall be controlled by the PS10 TDcontroller. Maximum input shall be 22dBu with CMRR 90dB@1kHz and noise floor below -100dB for the 0dB rear-panel switch. A 3-position, rear-panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +22/+16/+10dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and LS600 (VLF) displacement protection (also yellow). The chassis shall be constructed of steel with a black paint finish. Input power shall range from 110 to 220VAC continuously, 50-60Hz with a rear panel earth-lift. The 1RU controller shall weigh 2.9kg(6.4lbs), with exterior dimensions of 483mmW x 44mmH x 190mmD (19" x 1.75" x 7.5"). The chassis shall be constructed of steel with a black paint finish. The controller shall be the NEXO PS10 TDcontroller R2. The unit shall be UL approved and comply with electrical international standard (CB scheme) based upon the European standard EI60065. The unit shall fulfill the electromagnetic requirement of the harmonized standards EN55013, EN55020 and of the requirement of the FCC PART 15 CLASS b regulation. Other integrated loudspeaker-controllers shall be acceptable, provided independent laboratory test results verify these specifications are equaled or exceeded.

System configurations



PS10-R2/LS600 with NXAMP 4x1



PS10-R2/LS600 with PS10 TDController-R2

NEXO

PS10-R2 Loudspeaker Specifications

Product Features

Components	1 x 10" (25cm) Shielded Neodymium 8Ω driver HF 1 x 1" throat driver + Low Distortion Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	515mm x 316mm x 277 mm (20.28" x 12.44" x 10.91")
Weight	14 kg (31 lbs)
Connectors	2 x NL4MP Speakon 4 pole
Construction Baltic	Baltic Birch Ply finished with textured black coating
Fittings	2 Metal recessed pockets
Front finish	Moulded Dark Grey Metal Grill
Flying Points	One plate connecting with external accessories
Stand fittings	Built in Steel Stand Fitting, (35mm 1 3/8")

System Specifications PS10-R2 with PS10 TDController-R2

Frequency Response [a]	65 Hz - 20 kHz ±3dB
Usable Range @-6dB [a]	58 Hz - 21 kHz
Sensitivity 1W @ 1m [b]	99 dB SPL Nominal – 97 dB SPL Wideband
Nominal Peak SPL @ 1m [b]	129 to 132 dB Peak
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn, 4 positions
Directivity Q & DI [c]	Q : 16 Nominal DI : 12 dB Nominal (f > 3 kHz)
Crossover Frequencies	2 kHz Passive
Nominal Impedance	8Ω
Recommended Amplifiers	500 to 1250 W / 8 Ω

LS600-SUB Sub-Bass Specifications

Product Features

Components	LF 1 x 15" (38cm) long excursion Neodymium 8Ω driver
Height x Width x Depth	435mm x 688mm x 528 mm (17.12" x 27.09" x 20.79")
Weight	30 kg (66 Lbs)
Connectors	2 x NL4MP Speakon 4 pole
Construction	Baltic Birch Ply & textured black coating
Fittings	Handles 2 Metal recessed pockets
Flying Points	One plate connecting with external accessories
Stand fittings	Internal Steel Stand Fitting on Top (35mm, 1 3/8") allows pole mounting for 1 PS10-R2

System Specifications LS600 with PS10 TDController-R2

Frequency Response [a]	40 Hz - 110 Hz ±3dB
Usable Range @-6dB [a]	38Hz - 120 Hz
Sensitivity 1W @ 1m [b]	101 dB SPL Nominal
Nominal Peak SPL @ 1m [b]	135 to 138 dB Peak
Crossover Frequencies	120 Hz Active through PS10 TDController-R2
Nominal Impedance	8Ω
Recommended Amplifiers	1000 to 2000W / 8Ω

PS10 TDController-R2 Specifications

Product Features

Audio Inputs	Two L&R Audio inputs. Electronically balanced, 36 kOhm. Two XLR-3F connectors.
Sense Inputs	Three Amplifier Sense Inputs (PS10-R2 L&R, LS600). 150 kOhm. 6 Pole Removable Strip Terminal.
Audio Outputs	Two L&R PS10 Audio outputs. Electronically balanced, 50 Ohm. Two XLR-3M. One Mono (L+R) LS600 Audio output. Electronically balanced, 50 Ohm. One XLR-3M.
Controls	Std/Max Protection Trimmer. Gain switch (back panel), 3 positions for Amps with Gain : -6 / 0 / +6 dB. Sub On switch & Sub Gain Control.
Indicators	Speaker Protect LEDs. Amp Sense & Peak LEDs.
Dimensions	1U 19" Rack. 190mm (7.5") Depth
Weight	2.9 kg (6.6 lbs) net
Power Supply	110/220 Volts (internal wiring), 50/60Hz. Earth-Lift (back panel)
Dimensions & Weight	1U 19" Rack. 190mm (7.5") Depth. 2.9 kg (6.6 lbs) net

Specifications

Input Level	+28dBm max into 600ohm.
Output Level	+20 dBm Max. +19dBm Max on 1kOhm
Noise	-88 dBm (22 Hz - 22 kHz, UnWeighted)
THD+N	< 0.03% Typ. 0.05 Max for +18dBm Output
Power Supply	110/220 Volts (internal wiring), 50/60Hz. Earth-Lift (back panel)

System Operation

Electronic Controller	The PS10 TDController-R2 is precisely matched to the PS10-R2 & LS600 cabinets and includes sophisticated protection systems. Using PS10-R2 & LS600 without a properly connected PS10 TDController-R2 will result in poor sound quality and can damage the components.
Dispersion configuration	After dismounting front grill from its fixings, the HF Horn can be rotated in 4 positions for dispersion configuration.
Sub-bass	The PS10-R2 can be used without optional LS600 Sub-Bass. Active two-way operation with the LS600 is included in the PS10 TDController-R2. One LS600 matches 2 x PS10-R2, additional LS600 may be used for enhanced LF capability.
Speaker Cables	PS10-R2 are wired 2- & 2+ on Speakon connectors, LS600 on 1- & 1+. Loop through Speakons are present on both. Single identical cables can thus be used to loop through combinations of up to 2 x PS10-R2 & 1 x LS600 in no particular order.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.
[a] Response curves & data : Anechoic Far Field for the PS10-R2 + PS10TDController-R2. Half-Space Anechoic radiation for the LS600 + PS10 TDController-R2.
[b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise.
Nominal refers to Voice Decade (300 Hz - 3 kHz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations.
Peak SPL is at clipping of recommended amplifier.
[c] Directivity curves & data : obtained by computer treatment on off axis response curves.
E&OE September 2009.

PS15

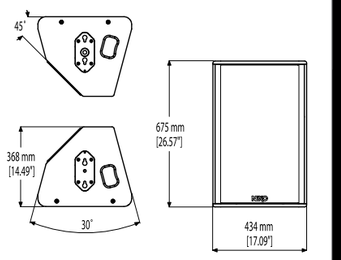
Key Features

- High-power system (136dB Peak SPL @ 1m) with 15in LF and 2in HF drivers.
- Rotatable asymmetrical horn and unique cabinet architecture ensure versatility; user-adaptable for both PA and stage monitoring applications.
- Two-way, switchable passive or active design for precise performance-matching to user requirements.
- Sophisticated control electronics ensure reliable, linear operation.
- Supported with a full range of mounting and flying accessories.

Architectural and Engineering Specifications

The 2-way loudspeaker system shall have one 15 inch shielded Neodymium 8Ω cone transducer and a 2 inch compression driver on a low distortion constant directivity asymmetrical dispersion horn. The system's horizontal coverage shall range from 50° to 100°, with vertical coverage of +25° and -30°. The user shall be able to rotate the horn in 4 directions as required by the application. The system shall have a Q of 16 and a Directivity Index that is 12 at frequencies above 1.5kHz. Nominal Sensitivity shall be 102dB (99dB wideband). When driven by a NEXO NXAMP 4x1, NXAMP 4x4 a PS15 TDController-R2 or by a NX242 properly connected to amplification capable of delivering 1000 to 2000 Watts into an 8Ω (nominal) load the system shall be capable of 133dB to 136dB peak SPL, with a frequency response of 50Hz to 18kHz ±3dB (47Hz to 18Hz -6dB). The system shall include an active or passive crossover with internal switching. Electrical connections shall be made via one of the two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 675mm H x 434mm W x 368mm D (26.6in H x 17.1in W x 14.5in D): the system shall weigh 29.0kg (65.0lbs). Exterior hardware shall include 1 metal plate, 2 attachment points and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the NEXO PS15 R2 with a PS15 TDController-R2, NXAMP 4x1, NXAMP 4x4 or NX242.



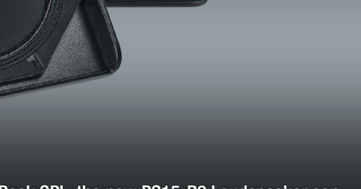
PS15-R2 Loudspeaker

A high power system capable of producing 136dB Peak SPL, the new PS15-R2 Loudspeaker can be safely driven with up to 2000 Watts of amplifier power. Controlled by the new, dedicated PS 15 TDController-R2, or the NXAMP Powered Controller, the PS15-R2 achieves high SPLs and wide bandwidth performance, despite being only half the weight and volume of common trapezoidal loudspeaker systems.

Along with the flexible coverage patterns enabled by NEXO's proprietary constant directivity asymmetrical dispersion horn, the architecture and weight balance of the PS15-R2 are designed to provide both uncompromised PA and stage monitor performance from a single speaker. Left and Right versions of the PS15-R2 have been developed to provide a true stereo image – particularly important for wedge applications. The 2-way passive 8Ω design uses a single amplifier channel to deliver bi-amped performance, reducing system cost, size and complexity, while the new cabinet design incorporates a pole mount and a new hardware adapter compatible with a vast array of touring and fixed installation accessories.

PS15-R2 horizontal coverage, +25°

PS15-R2 horizontal coverage, 0°



PS15-R2 horizontal coverage, -25°

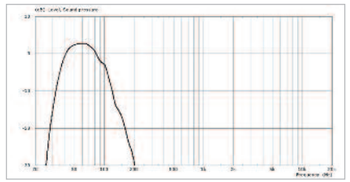
System Applications

- High-power mid-sized touring, installed PA for clubs, A/V, theater, Houses of Worship, broadcast, etc.
- High-quality, extremely powerful stage monitoring for A/V, theatre, cabarets, broadcast, etc.
- Fill-in system for any PA requiring side, down and near-field augmentation.

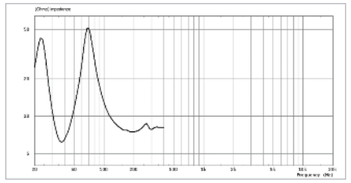
RS15-SUB Sub-Bass

Extending the usable range of the PS15-R2 Loudspeaker to 35Hz, the RS15 is the first offering of NEXO's patent pending RAY SUB Technology. The RAY SUB Technology is based on optimizing positioning and phase relationships of radiating surfaces in vented enclosures, permitting acoustic distance from rear to front sections to always increase as frequency decreases; consequently rear and front sections sum up efficiently over the entire subwoofer bandwidth, allowing for an average of 5db gain from the rear section in the forward direction and cancelling in the rear direction.

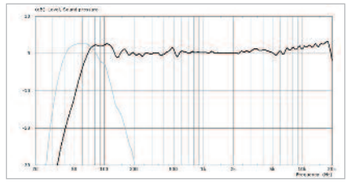
Utilized in a stand alone format, RAY SUB Technology, allows the same cabinet to be configured for any polar pattern, omni-directional as a standard direct radiating subwoofer when speakers are facing the audience, or highly directional when a speaker cabinet is rotated sideways or upwards. With arrays, RAY SUB subwoofers can be set back to back, front to front, alternate, in vertical columns, and when column length is sufficient be beam-steered upwards or downwards. Comprised of a 15 inch transducer with a frequency response of 35Hz – 200Hz in omni or 35Hz- 150Hz in directional mode and a sensitivity of 105db SPL, the RS15 presents an unchallenged versatility for installations and touring requirements.



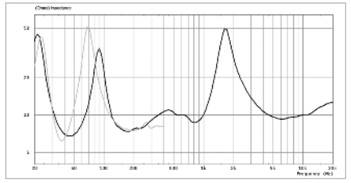
RS15 response



RS15 impedance



PS15-R2 + RS15 response



PS15-R2 + RS15 impedance

RS15
SubBass

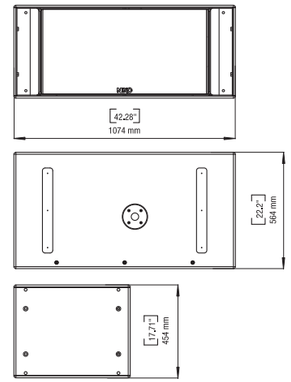
RS15-SUB Sub-Bass Key Features

- Low profile, high output, modular scalable bass.
- Configurable directivity pattern.
- Cardioid pattern reduces rear levels by minimizing rear/side wall reflections.
- Aerodynamic profiled vents with 20db noise reduction and improved linearity at high SPL.
- Applies across entire NEXO product line.

Architectural and Engineering Specifications

The sub-bass loudspeaker system shall have two 15inch long excursion 8Ω cone transducers. Nominal Sensitivity shall be 105dB. When driven by a NXAMP 4x1, NXAMP 4x4 a PS15 TDController- R2 or by a NX242 properly-connected to amplification capable of delivering 2x700 to 2x1200 Watts into a 8Ω (nominal) load the system shall be capable of 136dB to 139dB peak SPL, with a frequency response of 35Hz to 100Hz ±3dB (35Hz to 250kHz -6dB). The system shall include an active crossover. Electrical connections shall be made via two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 454mm H x 564mm W x 1074mm D (17.9in H x 22.2in W x 42.3in D): the system shall weigh 52.0kg (116lbs). Exterior hardware shall include 1- pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the RS15 with a PS15 TDController-R2, NXAMP 4x1, NXAMP 4x4 or NX242.



PS15

Key Features

- Precision circuits engineered for the PS15-R2/RS15 systems permit increased sound pressure and operational reliability.
- Servo controlled VCEQs provide precise dynamic control without spectral imbalance.
- Two inputs and three outputs enable a single PS15 TDController-R2 to manage multiple PS15-R2 and RS15 products.
- User configurable for passive or active (bi-amp) operation of the PS15-R2 Loudspeaker.
- Comprehensive indicators and controls.

PS15 TDController-R2

The PS15 TDController-R2is an advanced analogue processor that allows the PS15-R2 Loudspeaker and optional RS15 Subwoofer to achieve exceptional performance from such compact packages. The PS15 TDController-R2 provides crossover, sensed amplifier control and system equalisation optimised for the PS15-R2 and RS15.

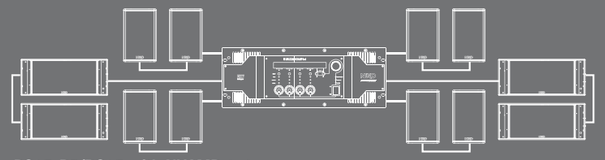
The PS15 TDController-R2 also features user-selectable passive or active (bi-amp) operation of the PS15-R2 Loudspeaker. One PS15 TDController-R2 has two inputs and three outputs, including summed sub out, minimising installation cost and complexity.

Like all NEXO processors, the PS15 TDController-R2 provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

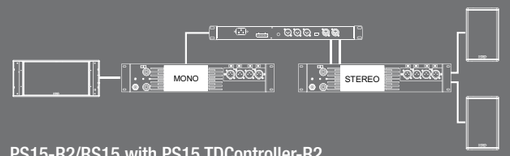
Architectural and Engineering Specifications

The 1RU PS15 TDcontroller R2 shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, and mid-filter limiters for NEXO PS15-R2 products. The unit shall have electronically balanced analogue inputs and outputs. Each input must provide LF shelving filter to compensate ground or stacking effects, ±6dB LEVEL TRIM controls for each output must be independent and directly accessible through front-panel potentiometers. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS15-R2 loudspeakers to exceed speaker-dependent thresholds. The controller shall have 3x inputs providing feedback from amplifier output to allow real time protections on real voltage. The device shall change between passive and active switching through internal jumper connections. Maximum input shall be 22dBu with CMRR 90dB@1kHz and THD+N 0.05%@1kHz at +18dBm output. A 3-position, rear panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +28/+22/+16dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp-Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and RS15 (VLF) displacement protection (also yellow). The unit shall have the following front panel controls: Overlap/Crossover Switch; 2x Bass EQ trimmers; 3x Peak Limiter Adjust trimmers; 3x Gain trimmers, and the following LED indicators: Power On; Active Mode; Amp-Sense; Amp Peak; Speaker Protect. The unit's rear panel shall have the following controls: 3-position Amp Gain switch; Active/Passive mode switch; 3x Protection trimmers; Earth Lift. The 1RU device shall weigh 3.3kg(7.3lbs), be steel-constructed, with a blue paint finish and exterior dimensions of 483mmW, 44mmH and 210mmD (19" x 1.75" x 8.5"). Input power shall be 110/220VAC, 50-60Hz. The analog loudspeaker management controller shall be the NEXO PS15 TDcontrollerr R2. The unit shall be UL approved and comply with electrical international standard (CB scheme) based upon the European standard EI60065. The unit shall fulfill the electromagnetic requirement of the harmonized standards EN55013, EN55020 and of the requirement of the FCC PART 15 CLASS b regulation. Other analog loudspeaker management controllers shall be acceptable, provided independent laboratory test results verify these specifications are equaled or exceeded.

System configurations



PS15-R2/RS15 with NXAMP 4x4



PS15-R2/RS15 with PS15 TDController-R2

NEXO

PS15-R2 Loudspeaker Specifications

Product Features

Components	LF 1 x 15" (38 cm) long excursion Neodymium 8Ω driver HF 1 x 2" throat, 3" Titanium diaphragm, driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	675mm x 434mm x 368 mm (26.57" x 17.08" x 14.48")
Weight	28 kg (62 lbs.)
Speakon Connectors	2x4 pole in & loop thru (switch passive to active inside).
Construction	Baltic Birch Ply finished with textured black coating
Fittings	Handles 2 Metal recessed pockets
Front finish	Moulded Dark Grey Metal Grill
Flying Points	Two plate connecting with external accessories
Stand fittings	Built in Steel Stand Fitting, (35mm 1 3/8")

System Specifications PS15-R2 with PS15 TDController-R2

Frequency Response [a]	50 Hz - 18 kHz ±3 dB
Usable Range @-6dB [a]	47 Hz - 18 kHz
Sensitivity 1W @ 1m [b]	102 dB SPL Nominal. 99 dB SPL Wideband
Nominal Peak SPL @ 1m [b]	133 to 136 dB Peak
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn - 4 positions
Directivity Q & DI [c]	Q : 16 Nominal DI : 12 dB Nominal (f > 1.5 kHz)
Crossover Frequencies	1.1 kHz Passive or Active (internally switchable)
Nominal Impedance	Passive : 8Ω or Active : LF : 8Ω & HF : 16Ω Important: Active Mode only available on NXAMP
Recommended Amplifiers	Passive: 1000 to 2000 W / 8Ω Active: (LF) 1000 to 2000 W / 8Ω - (HF) 250 to 500 W / 16Ω Important: Active Mode only available on NXAMP

RS15-SUB Sub-Bass Specifications

Product Features

Components	2 x 15" (38cm) long excursion Neodymium 8Ω drivers
Height x Width x Depth	454mm x 564mm x 1074 mm (17.9"x 22.2"x 42.3")
Weight	52 kg (116 lbs)
Speakon Connectors	2 x 4 pole (In & Loop Thru)
Construction	Baltic Birch Ply & textured black coating Dark Grey Carpet also available

RS15 with NX242, NXAMP or PS15 TDController-R2 System Specifications (Omni)

Frequency Response @ -3db [a]	35 Hz - 100 Hz
Usable Range @ -6db [a]	35 Hz - 250 Hz
Sensitivity 1W @ 1m [b]	105 dB SPL Nominal
Nominal Peak SPL @ 1m [b]	136 to 139 dB Peak
Crossover Frequencies	80 Hz - 200 Hz (Controller dependant)
Nominal Impedance	2 x 8Ω
Recommended Amplifiers	2 x 700W to 2 x 1200W / 8Ω

RS15 with NX242-ES4 or NXAMP System Specifications (Directional)

Frequency Response @ -3db [a]	35 Hz - 100 Hz
Usable Range @ -6db [a]	35 Hz - 150 Hz
Sensitivity 1W @ 1m [b]	103 dB SPL Nominal
Nominal Peak SPL @ 1m [b]	133 to 136 dB Peak
Crossover Frequencies	80 Hz - 125 Hz (Controller dependant)
Nominal Impedance	2 x 8Ω
Recommended Amplifiers	2 x 700W to 2 x 1200W / 8Ω

PS15 TDController-R2 Specifications

Product Features

Audio Inputs	Two L&R Audio inputs. Electronically balanced, 50KOhm. Two XLR-3F connectors.
Sense Inputs	Three Amplifier Sense Inputs, 180 kOhm. 6 Pole Removable Strip Terminal. Passive Mode, PS15 L&R, LS1200). Active Mode, PS15 LF and HF, LS1200.
Audio Outputs	Three audio outputs. Electronically balanced, 50 Ohm. Three XLR-3M connectors. Passive Mode, two PS15-R2 L&R, one Mono (L+R) RS15. Active Mode, one PS15-R2 LF, one PS15HF, one Mono (L+R) RS15
Controls	Front panel: Overlap/Crossover switch, Two Bass EQ trimmers (+/- 3 dB), Three Peak Limiter Adjust trimmers. Three Gain trimmers (+/- 6dB). Back panel: Gain switch (back panel), 3 positions for Amps with Gain : -6 / 0 / +6 dB. Internal: Active/Passive Mode switch. Three Protection trimmers.
Indicators	Speaker Protect LEDs. Amp Sense & Peak LEDs. Active Mode LED. Power ON LED.
Dimensions	1U 19" Rack. 210mm (8.5") Depth
Weight	3.3 kg (7.3 lbs) net
Power Supply	110/220 Volts (internal wiring), 50/60Hz. Earth-Lift (back panel)
Dimensions & Weight	1U 19" Rack. 190mm (7.5") Depth. 2.9 kg (6.6 lbs) net

Specifications

Input Level	+28dBm max into 600ohm
Output Level	+22dBm
Noise	-88 dBm (22 Hz - 22 kHz, UnWeighted)
THD+N	< 0.03% Typ. 0.05 Max for +18dBm Output
Power Supply	110/220 Volts (External Rear Panel Switch), 50/60Hz. Earth-Lift (back panel)

System Operation

Electronic Controller	The PS15TD Controller-R2 is precisely matched to the PS15-R2 & RS15 cabinets and includes protections. Using PS15-R2 & RS15 without a properly connected PS15 TDController-R2 will result in poor sound quality and can damage the components.
Dispersion configuration	After dismounting the front grille from its fixings, the HF Horn can be rotated in 4 positions for dispersion configuration.
Sub-bass	The PS15-R2 can be used without optional RS15 Sub-bass. Active two-way operation with RS15 is included in the PS15 TDController-R2. One RS15 matches 2 x PS15-R2, additional RS15 may be used for enhanced LF capability.
Speaker Cables	PS15R2 are wired 2-/2+ on Input Speakons in Passive Mode. PS1R25 are wired LF 1-/1+ & HF 2-/2° on Input Speakons in Active Mode. Please refer to RS15 User Manual for RS15 for RS15 connection.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.
[a] Response curves & data : Anechoic Far Field for the PS15-R2 + PS15TDController-R2. Half-Space Anechoic radiation for the RS15R2 + PS15TDController-R2.
[b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise.
Nominal refers to Voice Decade (300 Hz - 3 kHz), Wideband to the specified ±3 dB range. Data are for speaker + processor + recommended amplifier combinations.
Peak SPL is at clipping of recommended amplifier. Measurements made with PS15-R2s in passive operation mode.
[c] Directivity curves & data : obtained by computer treatment on off axis response curves.
E&OE September 2009.

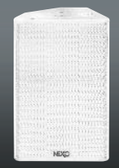
Mounting accessories

The PS R2 Series is supported by a comprehensive range of TUV certified mounting accessories designed to make it quick and easy to set up PS R2 Series systems in both mobile and fixed installations.

Sound contractors know that time is money, so PS R2 Series touring hardware draws on 30 years of NEXO experience to ensure maximum security and flexibility with minimum rigging time.

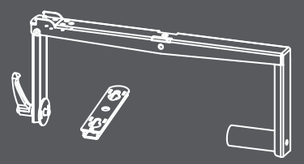
All PS R2 Series speakers ship with 35mm/1 3/8" pole mounts on the bottom of the cabinets for positioning on a general purpose speaker stand or mast inserted in top-fitted stand adapters on the sub-bass cabinets, while the PS10-R2 and PS15-R2 both feature steel anchor plates on the top for direct mounting onto a range of hanging and flying accessories (an adaptor plate is available for the PS8).

For outdoor installations, IP boxes are available giving full compliance with IP54 rating for protection from the harmful ingress of water.

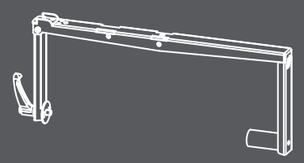


PS R2 Series Loudspeakers are also available in white.

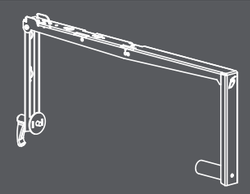
Touring



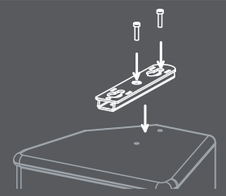
SSBRK8
U-Bracket for PS8
(includes ADPT adapter)



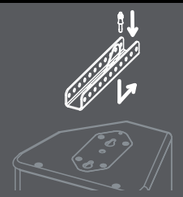
SSBRK10
U-Bracket for PS10-R2



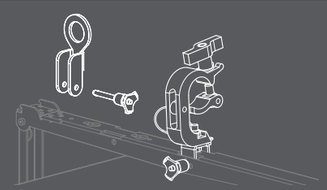
SSBRK15 U-Bracket for PS15-R2



ADPT Hardware adapter for PS8

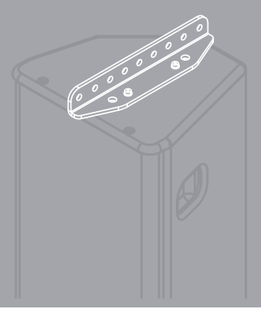


TTC Truss clamp bracket

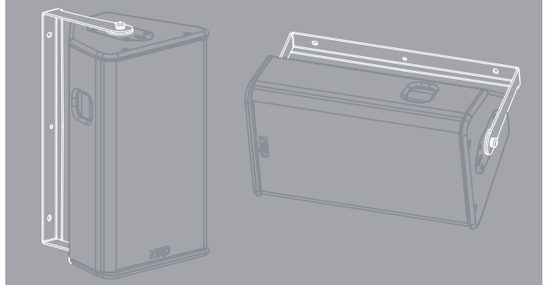


XHBRK Lifting ring
TCBRK Truss hook

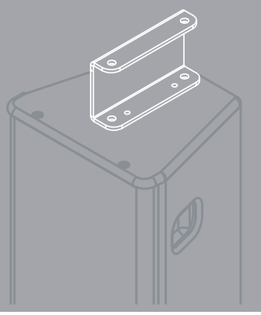
Installation



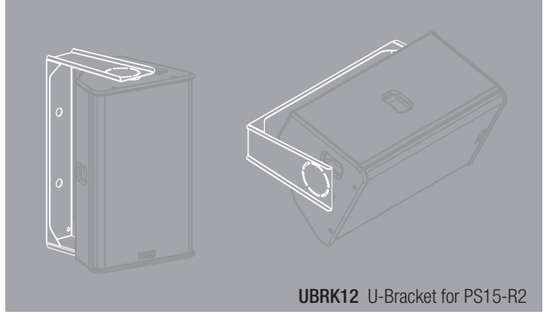
LBRK
Long mounting plate for
PS10-R2 & PS15-R2



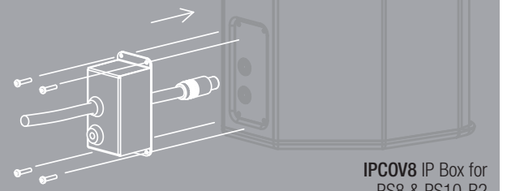
UBRK10 U-Bracket for PS10-R2



ABRK
Horizontal mounting plate for
PS10-R2 & PS15-R2

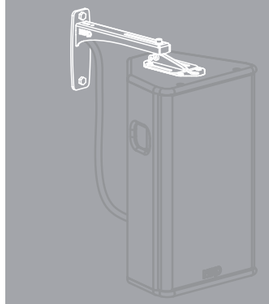


UBRK12 U-Bracket for PS15-R2



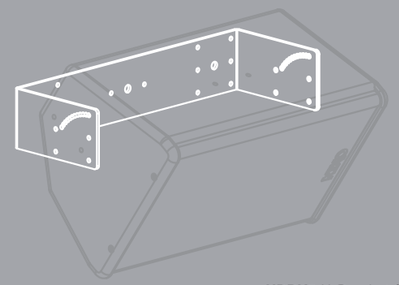
IPCOV8 IP Box for
PS8 & PS10-R2

IPCOV15 IP Box for
PS15-R2

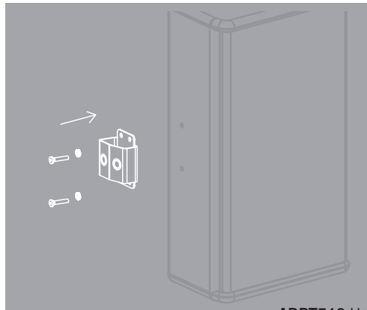


WS-10 Fixed hanging
bracket for PS8 & PS10-R2

WS-15 Fixed hanging
bracket for PS15-R2



UBRK8 U-Bracket for PS8



ADPT510 Hardware adapter for PS8

NXAMPS - 4x1 and 4x4 Powered TDControllers

NEXO NXAMP 4x1 and 4x4 Powered TDControllers integrate loudspeaker and amplifier control into a single device to provide PS R2 series users with a flexible, high-output amplification solution, with instant access to NXStream, Monitor and Standard presets (PS10-R2/PS-15R2). Alongside all the control parameters necessary to optimise loudspeaker performance, the NXAMPs also enable the user to manage the voltage/current/sense lines from the output, protecting both the amplifier and its power supply in real time.

Two 4-channel models with output capacities of 4x1300W under 2Ω (4x1) and 4x4000W under 2Ω (4x4) establish the NXAMP 4x1 as one of the most versatile amplifiers in the business, and the NXAMP 4x4 as one of the most powerful amplifiers ever produced.

Capable of powering multiple PS R2 Series loudspeakers, the versatility of the NXAMPs can be enhanced yet further with optional EtherSound 100 hardware.

Ether ES Sound 100

DIGITAL TD CONTROLLER NXAMP

Key Features

- Delivers cost-effective integration of amplifier and loudspeaker control
- Choice of 4x1300W and 4x4000W models
- Capable of powering multiple PS R2 Series loudspeakers
- Lighter and requires less rack space than conventional amplifier/processing systems
- Eliminates unnecessary A/D conversion
- Utilizes Yamaha EEEngine technology to deliver maximum efficiency in driver performance and power, with uncompromised sonic performance
- Optional EtherSound networking

NX242 TDController

NEXO's NX242 TDController is an advanced, proprietary digital processor that maintains exceptional performance and reliability in PS loudspeaker systems and associated Sub-Basses. The NX242 provides crossover, sensed-amplifier control and system alignment acoustically matched to each NEXO component.

DIGITAL TD CONTROLLER NX242

NAXMP Specifications

Power Specifications for NXAMP4x1

Number of amplifiers channels	4x channels, 2 by 2 bridgeable
Max. output voltage (no load)	4 x 105Volts
Max. output power (8Ω)	4 x 600W
Max. output power (4Ω)	4 x 900W
Max. output power (2Ω)	4 x 1300W
Power consumption (Standby)	10W
Power consumption (Idle)	100W
Power consumption (1/8 Power)	1100W

Power Specifications for NXAMP4x4

Number of amplifiers channels	4x channels, 2 by 2 bridgeable
Max. output voltage (no load)	4 x 200Volts
Max. output power (8Ω)	4 x 1900W
Max. output power (4Ω)	4 x 3300W
Max. output power (2Ω)	4 x 4000W
Power consumption (Standby)	20W
Power consumption (Idle)	150W
Power consumption (1/8 Power)	3000W

Common NXAMP Specifications from Analogue In to Power Out

Analogue Inputs channels	4x channels, analogue inputs on XLR 3 with a second XLR 3 for linking
Frequency response	±0.5dB from 10Hz to 20KHz
Input Impedance	20KΩ
Max Input Level	+28dBu
Dynamic Range	All Channels = 105dB unweighted
THD + Noise	Typical 0.1% flat setup
Latency time	500us on a flat setup
Power Supply	Dedicated version for 100 ~ 120Volts or 220 ~ 240Volts

Common NXAMP Features

Audio Inputs	4x balanced analogue inputs on XLR3 with a second XLR3 for linking, using 24bit converters. 4x digital inputs via the optional network card slot at the back.
Power Outputs	4x Speakon outputs using internal power relay for automatic output assignment regarding setup.
RS232 port	Allow firmware upgrade for software improvement and new cabinet setups.
GPIO port	5x Global Purpose Inputs and 8x Global Purpose Outputs for simple remote control and monitoring.
Processing	Two DSPs, 24bit data with 48bit accumulator. 700MIPS.

Front Panel	On/Off Mains switch, Select Wheel, Menu A and Menu B buttons, 40 characters by 2 lines display. Amp protect, Stand-by and power LED's. Then for each channel: volume indicator (15x LEDs), Individual Mute buttons and red LED, output current signal green led, Speaker Protection yellow LED, Amp. Peak red LED.
Rear Panel	1 (NXAMP4x1) or 2 (NXAMP4x4) mains socket; RS232 serial communications connector; GPIO port, Expansion slot for networking audio extension card, 4 XLR inputs with link and 4 Speakon 4 outputs.
Dimensions & Weight	NXAMP4x1: 3U 19" Rack - 457 mm (18") Depth - 16.5kg (33lbs) net NXAMP4x4: 4U 19" Rack - 457 mm (18") Depth - 24.5kg (49lbs) net

NXAMP User Controls

System Selection	Allows control across all NEXO ranges.
System Set-up	Within the selected range, if possible, allows cabinets to be set for passive or active mode, wideband or crossover mode, choose among available crossover point, cardioid or supercardioid mode.
Protection	Multiple Peak Limiters fitted for both selected cabinet and amplifier. Multiple Acceleration, Displacement and Temperature protections on every channel. Inter-channel regulation.
Delay	Up to 150m (330 ft.) of delay in 10cm (.4in) steps
Input Patching	Allows any of the 4x analogue (or digital) inputs combination to be routed on each output.
Output Gain	Global and inter-channel gain ±6dB in 0.5dB steps.
Volume control	Each channel with 16x steps from – inf dB to 0dB.
Save/Recall	Set-up Stores up to 40x user set-ups; On- the-fly recall, without mute or glitches for instant comparison.
Array EQ	LF or HF shelving filters to compensate ground or stacking effects, ±6dB, frequency factory tuned.
Security Mode	Password protected for Read-Only or Remote-Only Mode.
Remote control	Full remote control via the Ethersound protocol and ESmonitor software.
Certification	UL, SEMKO (CE), CCC, KOREA, TSS, PSE
Green status	Compliant with ROHS and WEEE directive

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